

ABSTRACT OF THE DISCLOSURE**MULTI-WAVELENGTH GRATING-OUTCOUPLED SURFACE EMITTING LASER
5 SYSTEM**

A surface emitting semiconductor laser system having four cavities that couple light from a single aperture. Each of the four cavities overlaps at the outcoupling aperture. Each cavity is fabricated to resonate at a different central wavelength, outputting a different frequency of light, 10 each of which can be independently modulated.